

ABSTRACT:

The project desire to conduct fundamental research on the catalysis of textile dyes in the presence of sunlight, from industrial discharge by the means of nanocomposites immobilized in alginate beads. The combine efficiency of nanocomposite immobilized in alginate beads will be investigated in order to enhance their photocatalytic efficiency for azo dye degradation as we can minimize pollution and its toxic effects from environment. The morphology of nanoparticles and their composites will be analyzed by different analytical techniques such as (XRD, SEM, UV/VIS spectrometry and FTIR). The photocatalytic degradation of azo dyes by nanocomposites immobilized in alginate beads will be carried out inside the Phtotoreactor. finally, their characterization and result deduction will be performed by means of different spectroscopic techniques such as F.T.I.R and U.V spectroscopy.